



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Laboratory Services and Applied Science Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0404

Project: 19-0404, Rockwell International Wheel & Trim - Reported by Daniel Adams

August 29, 2019

4LSASD-LSB

MEMORANDUM

SUBJECT: FINAL Analytical Report
Project: 19-0404, Rockwell International Wheel & Trim

FROM: Daniel Adams
ICS Analyst

THRU: Floyd Wellborn, Chief
LSB Inorganic Chemistry Section

TO: Shelby Johnston

Attached are the final results for the analytical groups listed below. This report shall not be reproduced except in full without approval of the Region 4 laboratory. These analyses were performed in accordance with the Laboratory Services Branch's Laboratory Operations and Quality Assurance Manual (LSB LOQAM) found at www.epa.gov/region4/sesd/asbsop. Any unique project data quality objectives specified in writing by the data requestor have also been incorporated into the data unless otherwise noted in the Report Narrative. Chemistry data have been verified based on the LSB LOQAM specifications and have been qualified by this laboratory if the applicable quality control criteria were not met. Verification is defined in Chapter 5 of the LSB LOQAM. For a listing of specific data qualifiers and explanations, please refer to the Data Qualifier Definitions included in this report. The reported results are accurate within the limits of the method(s) and are representative only of the samples as received by the laboratory.

Analyses Included in this report:

Method Used:

Accreditations:

Classical/Nutrient Analyses (CNA)

Classical/Nutrients	ASB 107C (Soil)	ISO
Classical/Nutrients	EPA 300.0 (Water)	ISO
Classical/Nutrients	SM 2320B (Water)	ISO
Classical/Nutrients	SM 5310B (Water)	ISO
Nitrate and/or Nitrite	EPA 353.2 (Water)	ISO



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Laboratory Services and Applied Science Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0404

Project: 19-0404, Rockwell International Wheel & Trim - Reported by Daniel Adams

Sample Disposal Policy

Due to limited space for long term sample storage, LSB's policy is to dispose of samples on a periodic schedule. Air samples collected in summa canisters will be disposed of 30 days following the issuance of this report. All other sample media including original samples, sample extracts and or digestates will be disposed of, in accordance with applicable regulations, 60 days from the date of this report.

This sample disposal policy does not apply to criminal samples which are held until the laboratory is notified by the criminal investigators that case development and litigation are complete.

These samples may be held in the laboratory's custody for a longer period of time. If samples require storage beyond the 60-day period, please contact the Sample Control Coordinator by e-mail at R4SampleCustody@epa.gov.

cc: Nardina Turner



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Laboratory Services and Applied Science Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0404

Project: 19-0404, Rockwell International Wheel & Trim - Reported by Daniel Adams

SAMPLES INCLUDED IN THIS REPORT

Project: 19-0404, Rockwell International Wheel & Trim

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
MIHPT20GW39	E193103-01	Groundwater	7/28/19 15:30	7/30/19 10:10
MIHPT23SB15	E193103-02	Subsurface Soil	7/29/19 09:00	7/30/19 10:10
MIHPT51GW25	E193103-03	Groundwater	7/27/19 17:00	7/30/19 10:10
MIHPT57GW29	E193108-01	Groundwater	7/29/19 15:45	8/2/19 10:00
MIHPT957GW29	E193108-02	Groundwater	7/29/19 15:45	8/2/19 10:00
MIHPT58SB20	E193108-03	Subsurface Soil	7/30/19 12:10	8/2/19 10:00
MIHPT05GW52	E193109-01	Groundwater	7/31/19 15:53	8/2/19 10:00
MIHPT22GW20	E193109-02	Groundwater	8/1/19 15:10	8/2/19 10:00
MIHPT22GW31	E193109-03	Groundwater	8/1/19 14:10	8/2/19 10:00
MIHPT22GW44	E193109-04	Groundwater	8/1/19 13:30	8/2/19 10:00
MIHPT58GW20	E193109-05	Groundwater	7/30/19 17:15	8/2/19 10:00



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Laboratory Services and Applied Science Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0404

Project: 19-0404, Rockwell International Wheel & Trim - Reported by Daniel Adams

DATA QUALIFIER DEFINITIONS

U The analyte was not detected at or above the reporting limit.
P-4 Sample received at pH > 2.

ACRONYMS AND ABBREVIATIONS

CAS Chemical Abstracts Service
Note: Analytes with no known CAS identifiers have been assigned codes beginning with "E", the EPA ID as assigned by the EPA Substance Registry System (www.epa.gov/srs), or beginning with "R4-", a unique identifier assigned by the EPA Region 4 laboratory.

MDL Method Detection Limit - The minimum concentration of a substance (an analyte) that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero.

MRL Minimum Reporting Limit - Analyte concentration that corresponds to the lowest demonstrated level of acceptable quantitation. The MRL is sample-specific and accounts for preparation weights and volumes, dilutions, and moisture content of soil/sediments.

TIC Tentatively Identified Compound - An analyte identified based on a match with the instrument software's mass spectral library. A calibration standard has not been analyzed to confirm the compound's identification or the estimated concentration reported.

ACCREDITATIONS:

ISO ASB is accredited by ISO/IEC 17025, including an amplification for forensic accreditation through ANSI-ASQ National Accreditation Board.
Refer to the certificate and scope of accreditation AT-1644 at:
<http://www.epa.gov/aboutepa/about-region-4s-science-and-ecosystem-support-division-sesd>

NR The EPA Region 4 Laboratory has not requested accreditation for this test.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Laboratory Services and Applied Science Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0404

Project: 19-0404, Rockwell International Wheel & Trim - Reported by Daniel Adams

Classical/Nutrient Analyses

Project: 19-0404, Rockwell International Wheel & Trim

Sample ID: MIHPT20GW39

Lab ID: E193103-01

Station ID: MIHPT20

Matrix: Groundwater

Date Collected: 7/28/19 15:30

<i>CAS Number</i>	<i>Analyte</i>	<i>Results</i>	<i>Qualifiers</i>	<i>Units</i>	<i>MRL</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Method</i>
E1640192	Alkalinity, Total (as CaCO ₃)	85		mg/L	1.0	8/05/19 8:06	8/05/19 8:06	SM 2320B
14808-79-8	Sulfate as SO ₄	41		mg/L	0.10	8/20/19 12:34	8/21/19 17:55	EPA 300.0
E701250	Total Organic Carbon	1.5		mg/L	1.0	8/08/19 16:07	8/09/19 15:01	SM 5310B
E701177	Nitrate/Nitrite as N	0.050	U, P-4	mg/L	0.050	8/12/19 13:25	8/13/19 16:41	EPA 353.2



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Laboratory Services and Applied Science Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0404

Project: 19-0404, Rockwell International Wheel & Trim - Reported by Daniel Adams

Classical/Nutrient Analyses

Project: 19-0404, Rockwell International Wheel & Trim

Sample ID: MIHPT23SB15

Lab ID: E193103-02

Station ID: MIHPT23

Matrix: Subsurface Soil

Date Collected: 7/29/19 9:00

CAS Number	Analyte	Results	Qualifiers	Units	MRL	Prepared	Analyzed	Method
E701250	Total Organic Carbon	12000	U	mg/kg dry	12000	8/08/19 16:11	8/14/19 13:55	ASB 107C



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Laboratory Services and Applied Science Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0404

Project: 19-0404, Rockwell International Wheel & Trim - Reported by Daniel Adams

Classical/Nutrient Analyses

Project: 19-0404, Rockwell International Wheel & Trim

Sample ID: MIHPT51GW25

Lab ID: E193103-03

Station ID: MIHPT51

Matrix: Groundwater

Date Collected: 7/27/19 17:00

<i>CAS Number</i>	<i>Analyte</i>	<i>Results</i>	<i>Qualifiers</i>	<i>Units</i>	<i>MRL</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Method</i>
E1640192	Alkalinity, Total (as CaCO ₃)	84		mg/L	1.0	8/05/19 8:06	8/05/19 8:06	SM 2320B
14808-79-8	Sulfate as SO ₄	34		mg/L	0.10	8/20/19 12:34	8/21/19 18:37	EPA 300.0
E701250	Total Organic Carbon	3.2		mg/L	1.0	8/08/19 16:07	8/09/19 16:16	SM 5310B
E701177	Nitrate/Nitrite as N	0.38		mg/L	0.050	8/12/19 13:25	8/13/19 16:41	EPA 353.2



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Laboratory Services and Applied Science Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0404

Project: 19-0404, Rockwell International Wheel & Trim - Reported by Daniel Adams

Classical/Nutrient Analyses

Project: 19-0404, Rockwell International Wheel & Trim

Sample ID: MIHPT57GW29

Lab ID: E193108-01

Station ID: MIHPT57

Matrix: Groundwater

Date Collected: 7/29/19 15:45

<i>CAS Number</i>	<i>Analyte</i>	<i>Results</i>	<i>Qualifiers</i>	<i>Units</i>	<i>MRL</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Method</i>
E1640192	Alkalinity, Total (as CaCO ₃)	29		mg/L	1.0	8/05/19 8:06	8/05/19 8:06	SM 2320B
14808-79-8	Sulfate as SO ₄	29		mg/L	0.10	8/20/19 12:34	8/21/19 19:19	EPA 300.0
E701250	Total Organic Carbon	1.1		mg/L	1.0	8/08/19 16:07	8/09/19 16:40	SM 5310B
E701177	Nitrate/Nitrite as N	0.050	U	mg/L	0.050	8/12/19 13:25	8/13/19 16:41	EPA 353.2



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Laboratory Services and Applied Science Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0404

Project: 19-0404, Rockwell International Wheel & Trim - Reported by Daniel Adams

Classical/Nutrient Analyses

Project: 19-0404, Rockwell International Wheel & Trim

Sample ID: MIHPT957GW29

Lab ID: E193108-02

Station ID: MIHPT57

Matrix: Groundwater

Date Collected: 7/29/19 15:45

<i>CAS Number</i>	<i>Analyte</i>	<i>Results</i>	<i>Qualifiers</i>	<i>Units</i>	<i>MRL</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Method</i>
E1640192	Alkalinity, Total (as CaCO ₃)	29		mg/L	1.0	8/05/19 8:06	8/05/19 8:06	SM 2320B
14808-79-8	Sulfate as SO ₄	28		mg/L	0.10	8/20/19 12:34	8/21/19 19:40	EPA 300.0
E701250	Total Organic Carbon	1.3		mg/L	1.0	8/08/19 16:07	8/09/19 17:04	SM 5310B
E701177	Nitrate/Nitrite as N	0.050	U	mg/L	0.050	8/12/19 13:25	8/13/19 16:41	EPA 353.2



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Laboratory Services and Applied Science Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0404

Project: 19-0404, Rockwell International Wheel & Trim - Reported by Daniel Adams

Classical/Nutrient Analyses

Project: 19-0404, Rockwell International Wheel & Trim

Sample ID: MIHPT58SB20

Lab ID: E193108-03

Station ID: MIHPT58

Matrix: Subsurface Soil

Date Collected: 7/30/19 12:10

<i>CAS Number</i>	<i>Analyte</i>	<i>Results</i>	<i>Qualifiers</i>	<i>Units</i>	<i>MRL</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Method</i>
E701250	Total Organic Carbon	12000	U	mg/kg dry	12000	8/08/19 16:11	8/14/19 15:40	ASB 107C



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Laboratory Services and Applied Science Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0404

Project: 19-0404, Rockwell International Wheel & Trim - Reported by Daniel Adams

Classical/Nutrient Analyses

Project: 19-0404, Rockwell International Wheel & Trim

Sample ID: MIHPT05GW52

Lab ID: E193109-01

Station ID: MIHPT05

Matrix: Groundwater

Date Collected: 7/31/19 15:53

<i>CAS Number</i>	<i>Analyte</i>	<i>Results</i>	<i>Qualifiers</i>	<i>Units</i>	<i>MRL</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Method</i>
E1640192	Alkalinity, Total (as CaCO ₃)	31		mg/L	1.0	8/05/19 8:06	8/05/19 8:06	SM 2320B
14808-79-8	Sulfate as SO ₄	23		mg/L	0.10	8/20/19 12:34	8/21/19 20:23	EPA 300.0
E701250	Total Organic Carbon	1.0	U	mg/L	1.0	8/08/19 16:07	8/09/19 17:29	SM 5310B
E701177	Nitrate/Nitrite as N	0.24		mg/L	0.050	8/12/19 13:25	8/13/19 16:41	EPA 353.2



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Laboratory Services and Applied Science Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0404

Project: 19-0404, Rockwell International Wheel & Trim - Reported by Daniel Adams

Classical/Nutrient Analyses

Project: 19-0404, Rockwell International Wheel & Trim

Sample ID: MIHPT22GW20

Lab ID: E193109-02

Station ID: MIHPT22

Matrix: Groundwater

Date Collected: 8/1/19 15:10

<i>CAS Number</i>	<i>Analyte</i>	<i>Results</i>	<i>Qualifiers</i>	<i>Units</i>	<i>MRL</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Method</i>
E1640192	Alkalinity, Total (as CaCO ₃)	30		mg/L	1.0	8/05/19 8:06	8/05/19 8:06	SM 2320B
14808-79-8	Sulfate as SO ₄	34		mg/L	0.10	8/20/19 12:34	8/21/19 20:44	EPA 300.0
E701250	Total Organic Carbon	1.0	U	mg/L	1.0	8/08/19 16:07	8/09/19 17:53	SM 5310B
E701177	Nitrate/Nitrite as N	0.48		mg/L	0.050	8/12/19 13:25	8/13/19 16:41	EPA 353.2



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Laboratory Services and Applied Science Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0404

Project: 19-0404, Rockwell International Wheel & Trim - Reported by Daniel Adams

Classical/Nutrient Analyses

Project: 19-0404, Rockwell International Wheel & Trim

Sample ID: MIHPT22GW31

Lab ID: E193109-03

Station ID: MIHPT22

Matrix: Groundwater

Date Collected: 8/1/19 14:10

<i>CAS Number</i>	<i>Analyte</i>	<i>Results</i>	<i>Qualifiers</i>	<i>Units</i>	<i>MRL</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Method</i>
E1640192	Alkalinity, Total (as CaCO ₃)	7.1		mg/L	1.0	8/05/19 8:06	8/05/19 8:06	SM 2320B
14808-79-8	Sulfate as SO ₄	27		mg/L	0.10	8/20/19 12:34	8/21/19 21:05	EPA 300.0
E701250	Total Organic Carbon	1.0	U	mg/L	1.0	8/08/19 16:07	8/09/19 18:17	SM 5310B
E701177	Nitrate/Nitrite as N	0.42		mg/L	0.050	8/12/19 13:25	8/13/19 16:41	EPA 353.2



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Laboratory Services and Applied Science Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0404

Project: 19-0404, Rockwell International Wheel & Trim - Reported by Daniel Adams

Classical/Nutrient Analyses

Project: 19-0404, Rockwell International Wheel & Trim

Sample ID: MIHPT22GW44

Lab ID: E193109-04

Station ID: MIHPT22

Matrix: Groundwater

Date Collected: 8/1/19 13:30

<i>CAS Number</i>	<i>Analyte</i>	<i>Results</i>	<i>Qualifiers</i>	<i>Units</i>	<i>MRL</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Method</i>
E1640192	Alkalinity, Total (as CaCO ₃)	52		mg/L	1.0	8/05/19 8:06	8/05/19 8:06	SM 2320B
14808-79-8	Sulfate as SO ₄	38		mg/L	0.10	8/20/19 12:34	8/21/19 21:26	EPA 300.0
E701250	Total Organic Carbon	2.4		mg/L	1.0	8/08/19 16:07	8/09/19 18:42	SM 5310B
E701177	Nitrate/Nitrite as N	0.050	U	mg/L	0.050	8/12/19 13:25	8/13/19 16:41	EPA 353.2



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Laboratory Services and Applied Science Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0404

Project: 19-0404, Rockwell International Wheel & Trim - Reported by Daniel Adams

Classical/Nutrient Analyses

Project: 19-0404, Rockwell International Wheel & Trim

Sample ID: MIHPT58GW20

Lab ID: E193109-05

Station ID: MIHPT58

Matrix: Groundwater

Date Collected: 7/30/19 17:15

<i>CAS Number</i>	<i>Analyte</i>	<i>Results</i>	<i>Qualifiers</i>	<i>Units</i>	<i>MRL</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Method</i>
E1640192	Alkalinity, Total (as CaCO ₃)	110		mg/L	1.0	8/05/19 8:06	8/05/19 8:06	SM 2320B
14808-79-8	Sulfate as SO ₄	17		mg/L	0.10	8/20/19 12:34	8/21/19 21:47	EPA 300.0
E701250	Total Organic Carbon	2.0		mg/L	1.0	8/08/19 16:07	8/09/19 19:06	SM 5310B
E701177	Nitrate/Nitrite as N	0.58		mg/L	0.050	8/12/19 13:25	8/13/19 16:41	EPA 353.2



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Laboratory Services and Applied Science Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0404

Project: 19-0404, Rockwell International Wheel & Trim - Reported by Daniel Adams

Classical/Nutrient Analyses (CNA) - Quality Control

US-EPA, Region 4, LSASD

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch 1908006 - C 2320B Alkalinity

Blank (1908006-BLK1)

Prepared & Analyzed: 08/05/19

SM 2320B

Alkalinity, Total (as CaCO3)	U	1.0	mg/L							U
------------------------------	---	-----	------	--	--	--	--	--	--	---

LCS (1908006-BS1)

Prepared & Analyzed: 08/05/19

SM 2320B

Alkalinity, Total (as CaCO3)	48.464		mg/L	50.000		96.9	93-114			
------------------------------	--------	--	------	--------	--	------	--------	--	--	--

LCS Dup (1908006-BSD1)

Prepared & Analyzed: 08/05/19

SM 2320B

Alkalinity, Total (as CaCO3)	49.368		mg/L	50.000		98.7	93-114	1.85	10	
------------------------------	--------	--	------	--------	--	------	--------	------	----	--

Duplicate (1908006-DUP1)

Source: E193108-02

Prepared & Analyzed: 08/05/19

SM 2320B

Alkalinity, Total (as CaCO3)	29.487	1.0	mg/L		29.419			0.231	10	
------------------------------	--------	-----	------	--	--------	--	--	-------	----	--

MRL Verification (1908006-PS1)

Prepared & Analyzed: 08/05/19

SM 2320B

Alkalinity, Total (as CaCO3)	0.94400		mg/L	1.0000		94.4	73-134			MRL-2
------------------------------	---------	--	------	--------	--	------	--------	--	--	-------

Batch 1908022 - C 415 TOC Wtr

Blank (1908022-BLK1)

Prepared: 08/08/19 Analyzed: 08/09/19

SM 5310B

Total Organic Carbon	U	1.0	mg/L							U
----------------------	---	-----	------	--	--	--	--	--	--	---

LCS (1908022-BS1)

Prepared: 08/08/19 Analyzed: 08/09/19

SM 5310B

Total Organic Carbon	47.510	1.0	mg/L	50.000		95.0	90-110			
----------------------	--------	-----	------	--------	--	------	--------	--	--	--

LCS (1908022-BS2)

Prepared: 08/08/19 Analyzed: 08/09/19

SM 5310B

Total Organic Carbon	4.9540	1.0	mg/L	5.0000		99.1	90-110			
----------------------	--------	-----	------	--------	--	------	--------	--	--	--

LCS Dup (1908022-BSD1)

Prepared: 08/08/19 Analyzed: 08/09/19

SM 5310B

Total Organic Carbon	47.240	1.0	mg/L	50.000		94.5	90-110	0.570	10	
----------------------	--------	-----	------	--------	--	------	--------	-------	----	--



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Laboratory Services and Applied Science Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0404

Project: 19-0404, Rockwell International Wheel & Trim - Reported by Daniel Adams

Classical/Nutrient Analyses (CNA) - Quality Control

US-EPA, Region 4, LSASD

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch 1908022 - C 415 TOC Wtr

Matrix Spike (1908022-MS1)

Source: E193103-01

Prepared: 08/08/19 Analyzed: 08/09/19

SM 5310B

Total Organic Carbon	51.230	1.0	mg/L	50.000	1.5400	99.4	90-110			
----------------------	--------	-----	------	--------	--------	------	--------	--	--	--

Matrix Spike Dup (1908022-MSD1)

Source: E193103-01

Prepared: 08/08/19 Analyzed: 08/09/19

SM 5310B

Total Organic Carbon	51.770	1.0	mg/L	50.000	1.5400	100	90-110	1.05	10	
----------------------	--------	-----	------	--------	--------	-----	--------	------	----	--

MRL Verification (1908022-PS1)

Prepared: 08/08/19 Analyzed: 08/09/19

SM 5310B

Total Organic Carbon	1.1200	1.0	mg/L	1.0000		112	70-130			MRL-2
----------------------	--------	-----	------	--------	--	-----	--------	--	--	-------

Batch 1908023 - C ASB107C TOC

Blank (1908023-BLK1)

Prepared: 08/08/19 Analyzed: 08/14/19

ASB 107C

Total Organic Carbon	U	12000	mg/kg dry							U
----------------------	---	-------	-----------	--	--	--	--	--	--	---

LCS (1908023-BS1)

Prepared: 08/08/19 Analyzed: 08/14/19

ASB 107C

Total Organic Carbon	40424	12000	mg/kg dry	40896		98.8	90-110			
----------------------	-------	-------	-----------	-------	--	------	--------	--	--	--

Matrix Spike (1908023-MS1)

Source: E193103-02

Prepared: 08/08/19 Analyzed: 08/14/19

ASB 107C

Total Organic Carbon	39117	12000	mg/kg dry	40012	U	97.8	90-110			
----------------------	-------	-------	-----------	-------	---	------	--------	--	--	--

Matrix Spike Dup (1908023-MSD1)

Source: E193103-02

Prepared: 08/08/19 Analyzed: 08/14/19

ASB 107C

Total Organic Carbon	40190	12000	mg/kg dry	40708	U	98.7	90-110	0.982	20	
----------------------	-------	-------	-----------	-------	---	------	--------	-------	----	--

MRL Verification (1908023-PS1)

Prepared: 08/08/19 Analyzed: 08/14/19

ASB 107C

Total Organic Carbon	11004	12000	mg/kg dry	11680		94.2	85-115			MRL-3, U
----------------------	-------	-------	-----------	-------	--	------	--------	--	--	-------------

Batch 1908028 - C 353.2 NO3-NO2

Blank (1908028-BLK1)

Prepared: 08/12/19 Analyzed: 08/13/19

EPA 353.2



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Laboratory Services and Applied Science Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0404

Project: 19-0404, Rockwell International Wheel & Trim - Reported by Daniel Adams

Classical/Nutrient Analyses (CNA) - Quality Control

US-EPA, Region 4, LSASD

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 1908028 - C 353.2 NO3-NO2

Blank (1908028-BLK1)

Prepared: 08/12/19 Analyzed: 08/13/19

Nitrate/Nitrite as N	U	0.050	mg/L							U
----------------------	---	-------	------	--	--	--	--	--	--	---

LCS (1908028-BS1)

Prepared: 08/12/19 Analyzed: 08/13/19

EPA 353.2

Nitrate/Nitrite as N	0.49110	0.050	mg/L	0.50150		97.9	90-110			
----------------------	---------	-------	------	---------	--	------	--------	--	--	--

Matrix Spike (1908028-MS1)

Source: E193109-01

Prepared: 08/12/19 Analyzed: 08/13/19

EPA 353.2

Nitrate/Nitrite as N	0.72890	0.050	mg/L	0.50150	0.24470	96.6	90-110			
----------------------	---------	-------	------	---------	---------	------	--------	--	--	--

Matrix Spike Dup (1908028-MSD1)

Source: E193109-01

Prepared: 08/12/19 Analyzed: 08/13/19

EPA 353.2

Nitrate/Nitrite as N	0.72980	0.050	mg/L	0.50150	0.24470	96.7	90-110	0.123	10	
----------------------	---------	-------	------	---------	---------	------	--------	-------	----	--

MRL Verification (1908028-PS1)

Prepared: 08/12/19 Analyzed: 08/13/19

EPA 353.2

Nitrate/Nitrite as N	0.051300	0.050	mg/L	0.050000		103	70-130			MRL-2
----------------------	----------	-------	------	----------	--	-----	--------	--	--	-------

Batch 1908059 - C 300.0 Ion Chromat

Blank (1908059-BLK1)

Prepared: 08/20/19 Analyzed: 08/21/19

EPA 300.0

Sulfate as SO4	U	0.10	mg/L							U
----------------	---	------	------	--	--	--	--	--	--	---

Blank (1908059-BLK2)

Prepared: 08/20/19 Analyzed: 08/21/19

EPA 300.0

Sulfate as SO4	U	0.10	mg/L							U
----------------	---	------	------	--	--	--	--	--	--	---

LCS (1908059-BS1)

Prepared: 08/20/19 Analyzed: 08/21/19

EPA 300.0

Sulfate as SO4	491.09	0.10	mg/L	500.00		98.2	90-110			
----------------	--------	------	------	--------	--	------	--------	--	--	--

LCS Dup (1908059-BSD1)

Prepared: 08/20/19 Analyzed: 08/21/19

EPA 300.0

Sulfate as SO4	499.86	0.10	mg/L	500.00		100	90-110	1.77	10	
----------------	--------	------	------	--------	--	-----	--------	------	----	--



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Laboratory Services and Applied Science Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0404

Project: 19-0404, Rockwell International Wheel & Trim - Reported by Daniel Adams

Classical/Nutrient Analyses (CNA) - Quality Control

US-EPA, Region 4, LSASD

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch 1908059 - C 300.0 Ion Chromat

Matrix Spike (1908059-MS1)

Source: E193103-01

Prepared: 08/20/19 Analyzed: 08/21/19

EPA 300.0

Sulfate as SO4	247.48	0.10	mg/L		41.331		90-110			MRL-2
----------------	--------	------	------	--	--------	--	--------	--	--	-------

MRL Verification (1908059-PS1)

Prepared: 08/20/19 Analyzed: 08/21/19

EPA 300.0

Sulfate as SO4	0.086000	0.10	mg/L	0.10000		86.0	70-130			MRL-2, U
----------------	----------	------	------	---------	--	------	--------	--	--	-------------



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Laboratory Services and Applied Science Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0404

Project: 19-0404, Rockwell International Wheel & Trim - Reported by Daniel Adams

Notes and Definitions for QC Samples

U	The analyte was not detected at or above the reporting limit.
MRL-2	MRL verification for Non-Potable Water matrix
MRL-3	MRL verification for Soil matrix